
A New Species of *Pouteria* Aublet (Sapotaceae) from Costa Rica and Colombia

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ABSTRACT. *Pouteria bulliformis*, a new species of tropical rainforest of Costa Rica and Colombia, is described and illustrated.

The opening of new roads, especially logging roads, into the Osa Peninsula within the last decade has been accompanied by colonization together with acceleration of the destruction of Costa Rica's most diverse tropical humid forest. However, these same roads have greatly facilitated botanical exploration, resulting in the discovery of numerous new species of trees.

Pouteria is a pantropical genus of about 350 species of trees, with about 200 species in the Neotropics (Pennington, 1990). The following description of *Pouteria bulliformis* Q. Jiménez & T. D. Pennington brings to 33 the number of species presently known from Costa Rica.

Pouteria bulliformis Q. Jiménez & T. D. Pennington, sp. nov. TYPE: Costa Rica. Puntarenas: Península de Osa, Reserva Biológica Marenco, 8°40'40"N, 83°41'00"W, 100 m, 16–20 Feb. 1988 (fl), Q. Jiménez et al. 552 (holotype, INB; isotype, K). Figure 1.

Ex affinitate *P. simulantis* Monachino surculis et inflorescentiis tomentosis; foliis minoribus, bullatis, apice rotundato, aliquando brevissimo cuspidato, nervis tomentosis praecipue differt.

Trees 15–30 m tall, with dense crown of spreading or occasionally pendulous branches. Trunk 30–45 cm DBH, generally cylindrical, with small buttresses up to 1 m high and 50 cm radially. Bark brown or reddish brown, exfoliating in rectangular plates up to 25 × 10 cm; inner bark white. Young branches densely ferruginous-tomentose. Petiole 1.7–3 cm long, channeled above, ferruginous-tomentose. Leaf blades dark green adaxially, pale green abaxially, 15–33 × 9–16 cm, broadly elliptic to elliptic-oblong or obovate, chartaceous, bullate,

ferruginous-tomentose below, especially on the veins, rounded apically and sometimes shortly cuspidate, rounded basally; margins entire; venation ± brochidodromous, midrib sunken adaxially, very prominent abaxially, secondary veins 14–23 pairs, parallel, straight or slightly arcuate, sunken adaxially, prominently abaxially, tertiary veins oblique, quaternaries reticulate. Inflorescences axillary, fascicles 2–8-flowered. Pedicels 4–21 mm long, densely ferruginous-tomentose. Sepals 5, ± free, imbricate, 4–4.5 mm long, ovate, rounded apically, pubescent without, glabrous within. Corolla cyathiform; tube ca. 3 mm long; lobes 5, imbricate, 3–3.5 mm long, broadly ovate, rounded apically, glabrous. Stamens 5; free portion of filaments ca. 0.75 mm long, anthers 2–2.5 mm long. Staminodes 5, alternating with the stamens, 2.5–3 mm long, lanceolate. Disk absent. Ovary conical, densely pubescent, 2-locular, locules uniovulate. Style ca. 1.5 mm long, glabrous, included. Fruit 4–4.2 × 3 cm, ellipsoid, obtuse to acute apically, rounded to truncate basally, sepals persistent, pubescent. Seeds ca. 3 cm long with an adaxial scar ca. 1 mm wide.

Distribution. *Pouteria bulliformis* is known by just a few collections from Costa Rica and Colombia. In Costa Rica it occurs in both the Pacific and Atlantic drainages. On the Pacific slope it is known only from the Osa Peninsula, while on the Atlantic it is known from coastal lowlands near Limón and from the Llanuras de San Carlos. The new species occurs in the Tropical Wet Forest and Tropical Wet Premontane Transition of the Holdridge system (Tosi, 1969), in a tropical rainforest type of vegetation (Gómez, 1986) with a hot, wet climate (Herrera, 1986). It is usually found on hilly, well-drained areas of primary forest. On the Osa Peninsula it grows in association with *Humirastrium diguense* Cuatrecasas, *Brosimum utile* (Kunth) Oken, and *Vochysia ferruginea* Martius.

Paratypes. COSTA RICA. **Puntarenas:** Península de

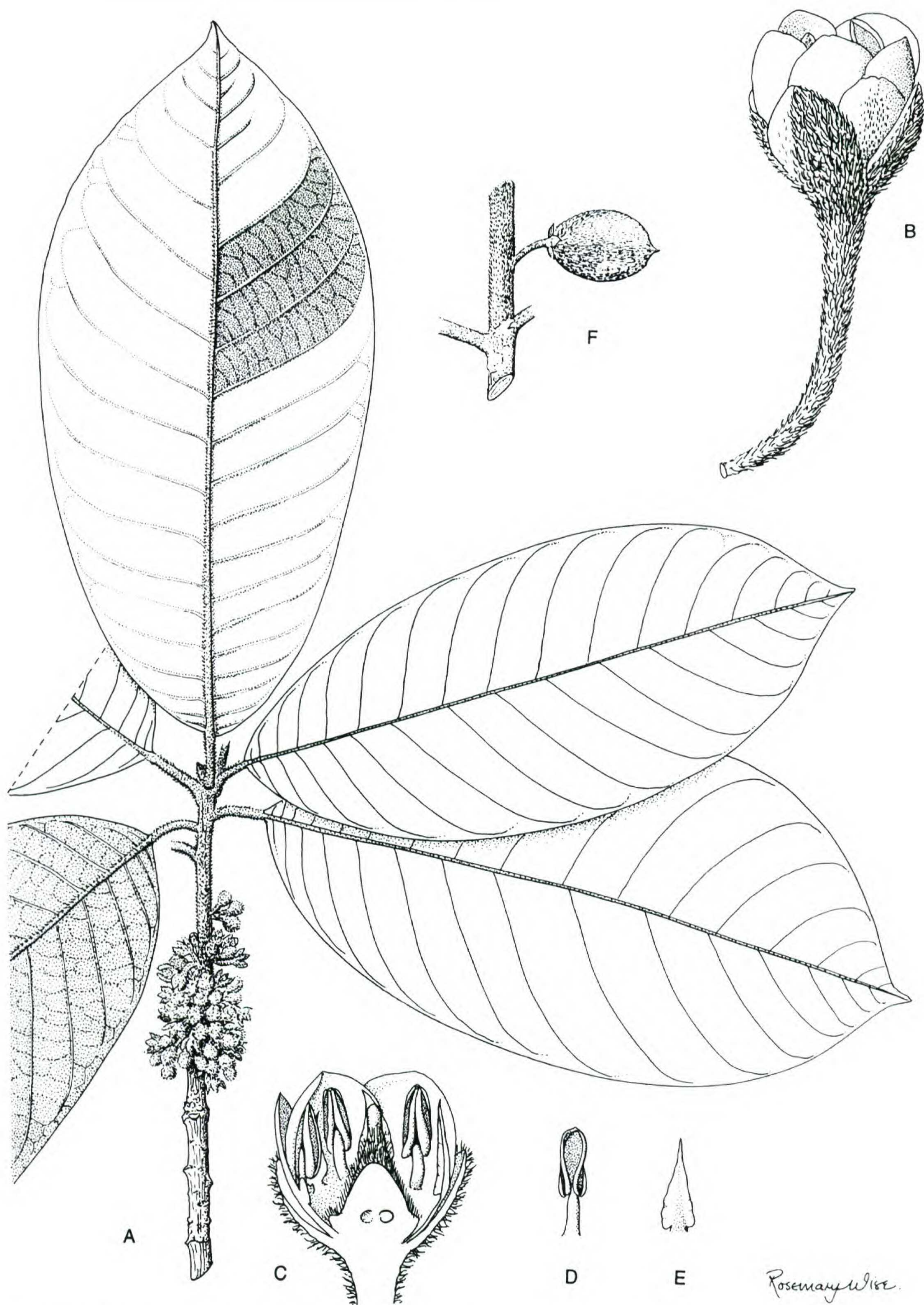


Figure 1. *Pouteria bulliformis* Q. Jiménez & T. D. Pennington. —A. Habit. —B. Flower. —C. Longitudinal section of flower. —D. Stamen. —E. Staminode. —F. Fruit. A, F: $\times 0.63$. B, C, D, E: $\times 3.6$.

Osa, Parque Nacional Corcovado, Estación Los Patos, Cerro Degra, 08°34'00"N, 83°31'00"W, 7 Sep. 1993, *R. Aguilar* 2269 (CR, INB, MO); Península de Osa, Parque Nacional Corcovado, Estación San Pedrillo, sendero a río Pargo, 08°37'00"N, 83°44'00"W, 13 Sep. 1993, *R. Aguilar* 2294 (CR, INB, MO); Península de Osa, Estación Biológica Marenco, 08°41'N, 83°42'W, 16–20 Feb. 1988, *W. Burger et al.* 12372 (CR, F); Península de Osa, Rincón, Aguabuena, cuenca media de Quebrada El Campo, 08°42'35"N, 83°31'50"W, 3 Oct. 1990, *G. Herrera* 4458 (CR, INB, MO); Península de Osa, Rancho Quemado, 08°41'N, 83°34'W, 28 Mar. 1989, *Q. Jiménez & B. Jaén* 682 (CR, INB, MO). **Limón:** Parque Recreativo Portete, 16 July 1982, *P. E. Sánchez* 120 (CR); Parque Recreativo Portete, 31 Jan. 1984, *T. D. Pennington & L. J. Poveda* 11453 (CR). **Heredia:** Sarapiquí, Cuatro Esquinas (entrando por Pital de San Carlos), Finca La Marinita, 18 Nov. 1983, *L. J. Poveda et al.* 3719 (CR). COLOMBIA. **Chocó:** Mun. Quibdó, Quibdó–Yutó, Río Cabi, 7 Apr. 1984, *F. García Cossio* 66 (K, MO). **Valle:** Bajo Calima, Concesión Pulpapel/Buenaventura, 12 Dec. 1984, *M. Monsalve* 601 (K).

Vernacular name: Chanó (Chocó).

Pouteria bulliformis belongs in the large (ca. 63 spp.) section *Franchetella* (Pierre) Eyma. It is most similar to *P. simulans* Monachino (Panama, Venezuela, and Peru), which has similar flowers and

fruits but differs in leaf morphology, as summarized below.

Pouteria simulans: Young shoots and inflorescences short-pubescent; leaves 2–3 times as long as broad, narrowly short-attenuate apically, plane, more or less glabrous.

Pouteria bulliformis: Young shoots and inflorescences tomentose, most leaves less than twice as long as broad, rounded apically, sometimes short cuspidate, bullate, tomentose at least on the veins.

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